

Claims.

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1.- A projection device, wherein light emitted from a  
5 light source system, is split in different colors, in  
particular primary colors, and subsequently is  
transmitted to respective light valves, said light source  
system comprising:

a plurality of light sources;  
10 a plurality of reflectors for condensing the light  
rays from the light sources;  
separation elements for dividing and interlacing the  
light of the light sources, wherein, in the optical path  
between said light sources and said separation elements  
15 additional reflecting means, preferably mirrors, are  
provided.

2.- A projection device, wherein light emitted from a  
light source system, is split in different colors, in  
20 particular primary colors, and subsequently is  
transmitted to respective light valves, said light source  
system comprising:

a plurality of light sources;  
a plurality of reflectors for condensing the light  
25 rays from the light sources;  
separation elements for dividing and interlacing the  
light of the light sources, wherein said reflectors are  
not facing each other.

3.- The projection device according to claim 1 or 2,  
wherein the reflectors are facing in the same direction.

4.- The projection device according to claim 3, wherein  
5 the reflectors are arranged next to each other.

5.- The projection device according to claim 4, wherein  
the reflectors with their front sides are substantially  
in the same plane.

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6.- A light source system having the features as  
described in any of the preceding claims.

7.- The projection device according to claim 1 or 2,  
15 wherein said projection device further comprises optical  
components which are arranged in such configuration that  
at least one splitting of the light emitted from said  
light source system takes place at a location in which  
the light of said light source system is still in a  
20 quasi-parallel or parallel state.

8.- The projection device according to claim 1 or 2,  
wherein said projection device further comprises optical  
components amongst which at least one light integrator or  
25 light integrator component, which integrator or light  
integrator component is located in the path followed by  
the light downstream of at least one light splitting  
element for realizing said light splitting.

9.- The projection device according to claim 8, wherein said device comprises a light integrator or light integrator components for each of said colors, each of these light integrators or light integrator components being located in the path followed by the light downstream of the light splitting elements creating the light of the color concerned.

10.- The projection device according to claim 8, wherein said light integrator components are substantially composed of fly-eye lenses, forming part of a fly-eye integrator.

11.- The projection device according to claim 8, wherein in the path of the light of at least one primary color, after being splitted from the other primary colors, a polarizer, in particular a prepolarizer, for example a prepolarizing array, is provided downstream from the corresponding integrator or integrator components.

12.- The projection device according to claim 8, wherein, in the path followed by the light, directly or indirectly downstream from said integrator or said integrator components, an imaging lens or condenser lens is provided.

13.- The projection device according to claim 8, wherein the path followed by the light, upstream from the light splitting elements, is free from an integrator or integrator components.

14.- The projection device according to claim 8, wherein the path followed by the light, upstream from the light splitting elements is free from any sort of polarizer, in particular prepolarizing arrays.  
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15.- The projection device according to claim 8, wherein the path followed by the light, upstream from the light splitting elements, is free from any sort of imaging or condenser lenses.  
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16.- The projection device according to claim 1 or 2, wherein said projection device further comprises optical components amongst which at least one polarizer, in particular a prepolarizing array, wherein this polarizer or prepolarizing array is located downstream from at least one light splitting element, and preferably downstream of all light splitting elements which are required to obtain the light of the color in which said polarizer or prepolarizing array is located.  
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17.- The projection device according to claim 1 or 2, wherein said light valves create colored images which by means of polarizing beam splitters, are directed to a color composition element, such as an X-cube, wherein at least one of said polarizing beam splitters, and preferably each of said polarizing beam splitters, consist of wire-grid polarizers.  
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